INDEX

Acetyl phosphate, Oxidation of, by *micrococcus lysodeikticus*. Abstract, 412

Acid-alkaline reaction, Methods for increasing the reliability of, in carbohydrate media as an indicator of fermentation. Abstract, 311

Ackerman, Helen, Stokinger, Herbert E. and Carpenter, Charles M., 129, 141, 149

Adams, G. A., and Stanier, R. Y. Abstract, 411

Adams, Mark H., and Roe, Amy S. Abstract, 432

Adams, Rebecca F., Spaulding, E. H., and Chemerda, Cecelia. Abstract, 449

Aerobacillus polymyxa, Bacteriophage of, in relation to the butylene glycol fermentation. Abstract, 444

—, Variation in, and its bearing on the development of an industrial butylene glycol fermentation. Abstract, 443

Aerobacter, *Aerobacillus* and *Aeromonas*, The oxidation of 2,3-butylene glycol in the genera. Abstract, 412

Aerobic and anaerobic conditions, The transformation of certain vitamins of the B-complex during decomposition under. Abstract, 312

— decomposition of cellulose by thermophilic bacteria, 117

Aeromonas fermentation, The nature of the. Abstract, 411

Agar cup assay of penicillin, A simplified technique for the, 402

Air-borne infection, Stages of suspension of. Abstract, 113

Aisenberg, Myron S., and Grubb, Thomas C. Abstract, 405

Alcaligenes radiobacter, The serological relationship of *Phytomonas tumefaciens* and. Abstract, 420

Alcohols, Oxidation of, by non-sulfur photosynthetic bacteria, 355

Alexander, Dorothy F., Raper, Kenneth B., and Coghill, Robert D. Abstract, 423

Allantoin, The decomposition of, by intestinal bacteria, 351

Allen, Paul J., Naghski, J., and Hoover, Sam R., 559

Allison, Franklin E., and Horner, C. Kenneth, 1

Alture-Werber, E., 399

Ames, Ada Mae, and Smith, Winslow Whitney. Abstract, 445

Amino acid interrelationships. The nutrition of *Proteus morganii*. Abstract, 435

Ammonia, The metabolism of, by *Azotobacter vinelandii*. Abstract, 410

Anaerobes, Investigations on the dehydrogenating properties of certain pathogenic obligate, 313

Anaerobic bacteria of intestinal origin, *Butyribacterium*, a new genus of gram-positive, non-sporulating, 301

Anderson, Charles R., 519

Anderson, E. O., Seeley, H. W., Jr., and Plastridge, W. N. Abstract, 440

Anderson, Thomas F. Abstract, 113

Antibacterial action, The, of surface active cations, 15

— substance, An, from a plant. Abstract, 422

Antibiotic activity as viewed by a mycologist. Abstract, 428

— agents, The bactericidal properties of. Abstract, 407

— substances, Factors influencing the speed and accuracy of a simple quantitative assay method of testing. Abstract, 424

—substances, Mode of action of. Abstract, 429

— substances, The nature of the, produced by *Aspergillus fumigatus*, 391

Antibodies, Effect of specific, on herpetic infection of the nervous system. Abstract, 469

—, Production of, *in vitro*. Abstract, 470

Antigenic fraction, Properties of an, isolated from cell-free gonococcal broth supernatants. Studies on the gonococcus. II, 141

— re-constitutions occurring in rough and diphtheroid cyclostages of hemolytic streptococci, Possible epidemiologic bearing of. Abstract, 473

Antigens, Embryonic chick, for complement fixation with the viruses of Eastern and Western equine encephalomyelitis. Abstract, 463

— of *Shigella sonnei*. Abstract, 579

Antihemolytic response: Titration of *Clostridium perfringens* antitoxin by, Hemolysis, and lecithinase activity. Abstract, 457
Antisulfanilamide activity, The comparative, of p-aminobenzoyl-1-(+)-glutamic acid and p-aminobenzoic acid. Abstract, 452
Appelbaum, Emanuel, and Falk, Carolyn R. Abstract, 459
Arabinose-fermenting bacterium, An, of the lactose-negative, mannitol-negative *Shigella* group, 171
Arylamines (p-a.b.a.?), Lack of correlation between the formation of, and resistance of staphylococci to sulfonamides. Abstract, 451
— (para-aminobenzoic acid (p.a.b.a?), Indispensability of tryptophane, and glucose or pyruvate for the formation of, by *Staphylococcus aureus*. Abstract, 450
Aspergillus flavus, Studies on. II. The production and properties of a penicillin-like substance-flavacidin, 187
— *fumigatus*, The nature of the antibiotic substances produced by, 391
Assay, a microbiological, for riboflavin B_2 using *Lactobacillus casei E*. Abstract, 113
—, cup, for penicillin, Procedure for the, 43
— method, Factors influencing the speed and accuracy of a simple quantitative, of testing antibiotic substances. Abstract, 424
Ayres, Gilbert B., and Tobie, Walter C., 109
Azochloramid, The combined bacteriostatic activity of sulfanilamide and, upon streptococci in *in vitro* and *in vivo* studies, 273
Azotobacter flagellation, and *Rhizobium* bacteriophage, Electron microscope studies on. Abstract, 415
—, Utilization of fixed nitrogen by, and influence on nitrogen fixation, 1
— *vinelandii*, The metabolism of ammonia by. Abstract, 410

Babbitt, Dorothea, and Fitzgerald, Robert J. Abstract, 416
B. cereus, Observations on the electron microscopy of, and tyrothricin action, 551
Bacillus, Further evidence demonstrating sugar utilization by certain members of the genus, where the pH of sugar-peptone media is not appreciably lowered. Abstract, 419
—, Glucose utilization compared with pH produced when influenced by concurrent decomposition of peptone by the genus. Abstract, 418
—*subtilis*, A study of the so-called Marburg and the Lawrence and Ford strains of, 381
— *subtilis and P. aeruginosa*, The effect of sodium azide on the gas metabolism of and the influence of pyocyanine on the gas exchange of a pyocyanine-free strain of *P. aeruginosa* in the presence of sodium azide. Studies of the effect of sodium azide on microbic growth and respiration. III, 239
Bacteria, The survival of, in streams. Abstract. (No abstract), 311
Bacterial populations, A study of cultural methods for the quantitative determination of, in distillery mashes. Abstract, 442
Bactericidal activity of vegetable juice. Abstract, 421
(*Bacteroides funduliformis*), Observations indicating a sexual mode of reproduction in a common bacterium. Abstract, 417
— strains, Various types of reproductive processes in. Abstract, 417
Bacteriophage in a butyl fermentation plant. Abstract, 443
— of *Aerobacillus polymyxa* in relation to the butylene glycol fermentation. Abstract, 444
Bacterium tularense, The action of sulfonamides and of para-aminobenzoic acid on, 529
— *typhosum*, Vi agglutinative properties for, demonstrated following infection with malaria parasites. Abstract, 582
Badger, Elizabeth, 509
Bailey, John Hays, and Cavallito, Chester J. Abstract, 411
Baker, Gladys E. Abstract
Barber, F. W., and Frazer, W. C., Abstract, 418
Barker, H. A., and Haas, Victoria, 301
— and Peterson, W. H., 307
Bartholomew, J. W., and Umbreit, W. W., Abstract, 415
Bartholomew, W. V., and Norman, A. G., 499

Bass, Kenneth, Friewer, Frances, DeMuth, V. Cook, and Snyder, Adele. Abstract, 406
Baylor, M. R. B., Severens, J. M., and Clark, G. L., 277
B-complex, The transformation of certain vitamins of the, during decomposition under aerobic and anaerobic conditions. Abstract, 312
Beal, Grace, Worley, Gordon, Jr., and Schuhardt, V. T. Abstract, 453
Bechdel, S. I., Stone, R. W., Reid, J. J., and Williams, P. S. Abstract, 441
Beer cooperage, Microbiological studies on. Abstract, 442
Bellamy, W. D., and Gunsalus, I. C., Abstract, 413
Benedict, Robert G. and Schmidt, William H. Abstract, 425
Berens, Conrad, and Chapman, George H. Abstract, 473
Bergey Manual for Determinative Bacteriology, The outline classification used in the. Abstract, 421
Berle, Lillian C., and Obold, Walter L. Abstract, 113
Bernheimer, Alan W., Abstract, 413
Berry, George P., Evans, Charles A., and Slavin, Howard B. Abstract, 468, 469
Bieter, Raymond N., Tsuchiya, Henry M., Drake, Charles H., and Halvorson, H. O. Abstract, 422
Binkley, Francis, Perlman, Ely, and Goebel, Walter F. Abstract, 476
Biochemical and serological properties of *Shigella dispar*. Abstract, 419
Biological stains; special problems caused by the war. Abstract, 414
Birkeland, Jorden M., and Randles, C. I. Abstract, 454
Black, J., and Weil, A. J., 575
Blair, John E. Abstract, 464
Bliss, Eleanor A., and Deitz, Helen C. Abstract, 449
Blood, human, Observations on the effect of ultra violet irradiation (Knott technic) on bacteria and their toxins suspended in, and appropriate diluents, 85
—, human whole, The comparative value of, human plasma and, for testing the coagulating power of staphylococci, 211
Blundell, George P., Erf, Lowell A., Jones, Harold W., and Hoban, Regina T., 85
Bodian, David, and Howe, Howard A., Abstract, 468
Bodkin, Richard E., and Smith, Winslow Whitney. Abstract, 445
Bohls, S. W., and Irons, J. V. Abstract, 463
Bohrer, C. W., Yesair, J., and Cameron, E. J. Abstract, 437
Bondi, Amedeo, Jr., and Deitz, Catherine Collins. Abstract, 426
Borman, Earle K., Stuart, C. A., and Wheeler, Kenneth M. Abstract, 420
Boruff, C. S., Garey, J. C., Rittschof, L. A., and Stone, L. Abstract, 442
Bovine intracutaneous and serological reactions to fractions of *Trichomonas foetus* (Protozoon), 505
Bozeman, S. R., and Orcutt, F. S., Abstract, 418
—, Orcutt, F. S., Coffee, W. B., and Ginsberg, H. Abstract, 419
Breed, Robert S., Murray, E. G. D., and Hitchens, A. Parker. Abstract, 421
Brewer, John H. Abstract, 456
Brown, Gordon C., and Francis, Thomas, Jr. Abstract, 463
Brown, J. Howard. Abstract, 454
Brucella, The *in vitro* effect of sulfonamides upon. Abstract, 453
Brueckner, A., Cowles, P. B., and Doede, D. Abstract. No abstract, 579
Burdon, Kenneth L. Abstract, 414
Burris, R. H., and Wilson, P. W. Abstract, 410
Butterfield, C. T., and Wattie, Elsie. Abstract, 444
Butyl fermentation plant, Bacteriophage in a. Abstract, 443
Butylene glycol fermentation, Bacteriophage of *Aerobacillus polymyxa* in relation to the. Abstract, 444
— glycol fermentation, Variation in *Aerobacillus polymyxa* and its bearing on the development of an industrial. Abstract, 443
— glycol, The oxidation of 2, 3, in the genera *Aerobacter*, *Aerobacillus* and *Aeromonas*. Abstract, 412
Butyribacterium, a new genus of gram-positive, non-sporulating anaerobic bacteria of intestinal origin, 301
Byers, S. O., Tytell, A. A., and Logan, M. A. Abstract, 456

Cameron, E. J., Yesair, J., and Bohrer, C. W. Abstract, 437
Canning, Home. I. Survey of bacteriological and other factors responsible for

the spoilage of home canned foods. Abstract, 438
Canning, Home. II. Determination of process times for home canned foods. Abstract, 438
Carbohydrate media, Methods for increasing the reliability of the acid-alkaline reaction in, as an indicator of fermentation. Abstract, 311
— metabolism, The effect of iron on, of *Clostridium perfringens*. Abstract, 413
— utilization by hydrocarbon bacteria, 373
Carbohydrates, The oxidation of, by hydrocarbon bacteria. Abstract, 311
Carbon and nitrogen sources, The utilization of various, by *Penicillium citrinum* Thom. Abstract, 411
— monoxide as an inhibitor of nitrogen fixation by the alga *Nostoc muscorum*. Abstract, 410
Cardiolipin, lecithin, and cholesterol in the antigen in the precipitation test for syphilis. Abstract, 581
Carpenter, Charles M., Stokinger, Herbert E., and Ackerman, Helen, 129, 141, 149
Carpenter, Philip L. Abstract, 419
Casein, An unidentified growth factor for *Listeria* in commercial "vitamin-free". Abstract, 433
Catalase, The action of sodium azide on bacterial. Studies on the effect of sodium azide on microbic growth and respiration. II., 231
Cationic detergents, Mechanism of growth inhibition by. Abstract, 454
Cations, The antibacterial action of surface active, 15
Cavallito, Chester, J., and Bailey, John Hays. Abstract, 411
Cell, Constituents of the. Studies on the gonococcus. I., 129
Cells, bacterial host, Virus reactions inside of. Abstract, 113
Cellulose, Aerobic decomposition of, by thermophilic bacteria, 117
Chapman, George H., 211
— Abstract, 472
— and Berens, Conrad. Abstract, 473
Chemerda, Cecelia, Spaulding, E. H., and Adams, Rebecca F. Abstract, 449
Chemical agents, The influence of, on the interaction of bacterial virus and bacterial cell. Abstract, 416
Chlorine and chloramine, Relative resistance of *Eberthella typhosa* and *Escherichia coli* to. Abstract, 444
—, The temperature coefficient of the bactericidal action of. Abstract, 445
Cholden, Louis S, 402
Cholesterol-decomposing, The, organisms of soils. Microbiological agencies in the degradation of steroids. I., 487
Christensen, L. Royal. Abstract, 471
Christensen, W. Blake, and Gowen, G. Howard, 171
Clark, Eugene S., Scott, Robert M. and Walker, Vernon L. Abstract, 445
Clark, G. L., Baylor, M. R. B., and Severens, J. M., 277
Clark, Phyllis, and Neter, Erwin R. Abstract, 459
Classification, The outline, used in the Bergey Manual for Determinative Bacteriology. Abstract, 421
Clavacin, Problems in the production and purification of. Abstract, 422
Clinical response of patients and correlated laboratory findings, An analysis of the therapeutic action of penicillin based on. Abstract, 430
Clostridia, A comparative study of material suitable for the cultivation of, 59
—, Simple media for the identification of. Abstract, 455
—, The cultural differentiation of. Abstract, 454
Clostridium acidi-urici, The nutritional requirements of, 307
— *perfringens* antitoxin, Titration of, by antihemolytic response: Hemolysis, and lecithinase activity. Abstract, 457
— *perfringens* hyaluronidase (spreading factor), The production of high titer. Abstract, 456
— *perfringens*, The effect of iron on carbohydrate metabolism of. Abstract, 413
— *septicum*, Production of toxin by, in a peptone-free medium. Abstract, 413
Codehydrogenase I and other pyridinium compounds as V-factor for *Hemophilus influenzae* and *H. parainfluenzae*, 535
Coffee, W. B., Orcutt, F. S., Ginsberg, H., and Bozeman, S. R., Abstract, 419
Coghill, Robert D., Raper, Kenneth B., and Alexander, Dorothy F. Abstract, 423

Coleman, Madeline F., and Reid, J. J. Abstract, 420
Coleman, Marion B. Abstract, 582
Connecticut Valley Branch, S. A. B. Proceedings, 579
Commission on Acute Respiratory Diseases, Station Hospital No. 2, Fort Bragg, N. C. Abstract, 460, 470
Complement fixation reaction, The, with the antigen of *Lymphogranuloma venereum* (Lygranum). Abstract, 464
Conn, H. J. Abstract, 414
Conn, Jean E., and Geiger, Walton B. Abstract, 422
Cooper, Merlin L., Tepper, Jack, and Keller, Helen M. Abstract, 477
Corynebacterium diphtheriae, A staining method for, 575
Counting bacteria, Mechanical aids in the direct microscopic method of, 495
Cowles, P. B., Brueckner, A., and Doede, D. Abstract. No abstract, 579
Crystal violet, The bactericidal and bacteriostatic action of, 177
Cultural methods, A study of, for the quantitative determination of bacterial populations in distillery mashes. Abstract, 442
Culture media, Substitutes in, 400
— media, Vitamin content of ingredients of microbiological, 293
Curran, Harold R., and Evans, Fred R. Abstract, 437
Czarnetzky, E. J. Abstract. (No abstract), 406

Daylight, Germicidal action of, on meningococci in the dried state, 79
DeBeer, E. J., Sherwood, M. B., and Falco, E. A. Abstract, 424
Decomposition of plant materials, Microbial thermogenesis in the. Part III. Simplified equipment for routine studies, 499
Dehydrogenating properties, Investigations on the, of certain pathogenic obligate anaerobes, 313
Deitz, Helen C., and Bliss, Eleanor A. Abstract, 449
DeMuth, V. Cook, Friewer, Frances, Snyder, Adele, and Bass, Kenneth. Abstract, 406
Dennison, W. Landon, and Johnson, Frank H. Abstract, 312
Dental flora of the rat, The effect of dietary carbohydrates on the. Abstract, 477
Diagnostic bacteriology, Importance of the use of thioglycollate medium in. Abstract, 455
— problems in tropical medicine. A. Malaria. B. The dysenteries. Abstract. (No abstract), 579
Dienes, Louis. Abstract, 417
Dietary carbohydrates, The effect of, on the dental flora of the rat. Abstract, 477
Dietz, Catherine Collins, and Bondi, Amedeo, Jr. Abstract, 426
Diphtheria in an "adequately" immunized community. Abstract, 581
—, malignant, Group B streptococci and. Abstract, 474
Diphtheroid streptococcus from endocarditis, A non-life cycle explanation of the, 327
Dissociation pattern, The influence of environment upon the. Bacterial variation. Abstract. No abstract, 579
Distillery mashes, A study of cultural methods for the quantitative determination of bacterial populations in. Abstract, 442
Doede, D., Cowles, P. B., and Brueckner, A. Abstract. No abstract, 579
Drake, Charles H., Tsuchiya, Henry M., Halvorson, H. O., and Bieter, Raymond N. Abstract, 422
Drying, The resistance of meningococcus to, 71
DuBois, A. S., and Valko, E. I., 15
Dunham, Wolcott, B., Hamre, Dorothy M., and Rake, Geoffrey. Abstract, 428
Dysenteries, The. Diagnostic problems in tropical medicine. B. Abstract. (No abstract), 579
Dysentery bacteriophage, Protective action of, in experimental infections in mice. Abstract, 475
— bacteriophage, The generation of, *in vivo* during experimental infections in mice. Abstract, 475

Eagle, Harry, and Magnuson, Harold J. Abstract, 427
— and Musselman, Arlyne D. Abstract, 428
Eastern New York Branch, S. A. B. Proceedings, 214, 581
Eastern Pennsylvania Chapter, S. A. B. Proceedings. 113

Eaton, Monroe D., Meiklejohn, Gordon, and Herick, William van. Abstract, 465
Eberthella typhosa and *Escherichia coli*, Relative resistance of, to chlorine and chloramine. Abstract, 444
— *typhosa* and *Salmonella*, Selective media, suitable for use in a hot climate, for the isolation of. Abstract, 458
Edwards, P. R., and Hughes, Hope. 574
Egg embryo, The effect of penicillin on experimental streptococcus, pneumococcus and staphylococcus infections of the. 573
— powder, Studies on the bacteriology of stored dried. Abstract, 439
— powder, The occurrence and possible significance of *Salmonella* organisms in Canadian dried. Abstract, 439
Eggs, embryonated, Stability of variola virus in. Abstract, 463
—, The distribution of influenza virus Type A in infected, and the survival of virus under certain conditions of storage. Abstract, 462
Electron micrographs of pleuropenumonia-like organisms, 523
— microscope studies of the bacteriophage of *Salmonella pullorum*, 277
— microscope studies on *Azobacter* flagellation and *Rhizobium* bacteriophage. Abstract, 415
— microscopy in the field of bacteriology. Abstract, 431
— microscopy of *B. cereus*, Observations on the, and tyrothricin action, 551
Ellerbusch, Vernon, Rehm, John B., and Sommer, Marie. Abstract, 442
Emmons, C. W., 107
Endocarditis, A non-life cycle explanation of the diphtheroid streptococcus from, 327
Encephalitis virus, Studies on the susceptibility of the white rat and hamster to St. Louis. Abstract, 465
Encephalomyelitis antiserum, Studies in passive immunity produced with Western equine. Abstract, 467
—, Embryonic chick antigens for complement fixation with the viruses of Eastern and Western equine. Abstract, 463
— (E.E.E.) viruses, Interference between Western (W.E.E.) and Eastern equine. Abstract, 466
— virus, Neutralizing antibody to Western equine. Abstract, 466
Endocarditis streptococci, *In vitro* studies upon: I. Temperature-sulfonamide relationships. Abstract, 449
Engley, Frank B., Jr., and Morton, Harry E. Abstract, 475
Enterobacteriaceae, Taxonomy of the. Abstract, 420
Enterococci, Nutrition of the, 335
Enzyme systems, The nature of the quinine inhibition of bacterial. Abstract, 406
Epstein, Jeanne A., Foley, E. J., and Lee, S. W., 110
—, Foley, E. J., and Lee, S. W., 573
Ercoli, N., Lewis, M. N., and Harker, Eleanor M. Abstract, 451
Erf, Lowell A., Blundell, George P., Jones, Harold W., and Hoban, Regina T., 85
Escherichia coli, Relative resistance of *Eberthella typhosa* and, to chlorine and chloramine. Abstract, 444
— *coli*, Studies of the synthesis of thiamin by certain strains of. Abstract, 434
Esselen, W. B., Jr., and Tischer, R. G. Abstract, 438
Evans, Charles A., Slavin, Howard B., and Berry, George P. Abstract, 468, 469
Evans, Fred R., and Curran, Harold R. Abstract, 437

Falco, E. A., Sherwood, M. B., and DeBeer, E. J. Abstract, 424
Falk, Carolyn R., and Appelbaum, Emanuel. Abstract, 459
Farrel, M. A., Reid, J. J., Keyes, E. A., and Shigley, J. F. Abstract, 440
Fatty material in bacteria and fungi revealed by a new staining procedure. Abstract, 414
Feces, The isolation of pathogenic staphylococci from, 211
Felsenfeld, Oscar. Abstract, 458
Fermentation, Methods for increasing the reliability of the acid-alkaline reaction in carbohydrate media as an indicator of. Abstract, 311
—, The effect of pyridoxine on tyrosine decarboxylation and on. Abstract, 413
Filters, A new style assembly for fritted, 379
Fisher, A. Murray. Abstract, 405

Fisher, Paul, and Pederson, Carl S. Abstract, 421
Fitzgerald, Robert J., and Babbitt, Dorothea. Abstract, 416
Flavacidin, The production and properties of a penicillin-like substance-Studies on *Apsergillus flavus*, II, 187
Flora, bacterial, of the respiratory tract, Evaluation of errors in determining the. Abstract, 470
Foley, E. J., Epstein, Jeanne A., and Lee, S. W., 110
—, Lee, S. W., and Epstein, Jeanne A., 573
— and Maren, Thomas H. Abstract, 580
Foley, M. Kathleen, and Schaub, Isabelle G. Abstract, 455
Foster, Alice Zimmerman, and Pike, Robert M., 97
Foster, Jackson W., 27, 355
—, Stokes, J. L., and Gunness, Marion, 293
— and Woodruff, H. Boyd, 43; Abstract, 425
Foy, John R., and Jurist, Vivian. Abstract, 434
Francis, Thomas, Jr., and Brown, Gordon C. Abstract, 463
Fratkin, S., and Stainier, R. Y. Abstract, 412
Frazier, W. C., and Barber, F. W. Abstract, 418
Friewer, Frances, DeMuth, V. Cook, Snyder, Adele, and Bass, Kenneth. Abstract, 406
Frobisher, Martin, Jr. Abstract, 479
— and Parsons, Elizabeth I. Abstract, 477
— and Updyke, Elaine. Abstract, 474
Fusarium, Misuse of the name "*Trichophyton rosaceum*" for a saprophytic, 107

Garey, J. C., Rittschof, L. A., Stone, L., and Boruff, C. S. Abstract, 442
Gastroenteritis, An unusual waterborne outbreak of. Abstract, 582
Geiger, Walton B., and Conn, Jean E. Abstract, 422
— and Waksman, Selman A., 391
Gelatin, A proposed standard method for the bacteriological examination of 30–40 mesh edible. Abstract, 436
Genung, Elizabeth F., and Lee, Miriam E. Abstract, 434
Germicidal action of daylight on meningococci in the dried state, 79
Germicides and antiseptics, Lack of correlation between plate tests and phenol coefficient determination on, 109
—, The action of mixtures of, against gram negative rods. Abstract, 427
Gerstung, Ruth B., and Landy, Maurice. Abstract, 448
Gibbons, N. E., and Moore, R. L. Abstract, 439
Gillespie, Hazel B. Abstract, 479
Gingrich, Wendell, and Schlenk, Fritz, 535
Ginsberg, H., Orcutt, F. S., Coffee, W. B., and Bozeman, S. R. Abstract, 419
Glucose fermentation, The effect of sodium azide on, and lactic acid production by streptococci and lactobacilli, Studies of the effect of sodium azide on microbic growth and respiration. IV, 253
— utilization compared with pH produced when influenced by concurrent decomposition of peptone by the genus *Bacillus*. Abstract, 418
Goebel, Walther F., Perlman, Ely, and Binkley, Francis. Abstract, 476
Goedrich, Paul. Abstract, 580
Goetchius, George R., and Lawrence, C. A. Abstract, 450
Gohar, M. A., 575
Gonococcal broth supernatants, Properties of an antigenic fraction isolated from cell-free. Studies on the gonococcus, II, 141
Gonococci, Use of liver extract as an enrichment factor for the growth of, 399
Gonococcus, Characteristics of the, and recent developments in the laboratory diagnosis of gonorrhea. Abstract. No abstract, 113
—, Studies on the. I. Constituents of the cell, 129
—, Studies on the. II. Properties of an antigenic fraction isolated from cell-free gonococcal broth supernatants, 141
—, Studies on the. III. Quantitative agglutinative reactions of the *Neisseria* with special reference to *Neisseria gonorrhoeae*, 149
—, The use of a solid medium for the transportation of specimens for culture of the. Abstract, 458
Gonorrhea, Characteristics of the gonococcus and recent developments in the laboratory diagnosis of. Abstract. No Abstract, 113
Gordon, F. B. Abstract, 465
— and Hilleman, M. R. Abstract, 464
Gould, R. Gordon, Kane, Lewis W., and Mueller, J. Howard, 287

Gowen, G. Howard, and Christensen, W. Blake, 171
Gram negative rods. The action of mixtures of germicides against. Abstract, 427
— stain, Ribonucleic acid and the. Abstract, 415
Green, Morris N., and Sevag, M. G. Abstract, 450, 451
Griffin, A. M., and Robbins, Mary Louise. Abstract, 461
Growth and pathogenicity, The rate of, of an attenuated human group C hemolytic streptococcus. Abstract, 472
— and respiration, Studies of the effect of sodium azide on microbic. I. The action of sodium azide on microbic growth, 221
— and respiration, Studies of the effect of sodium azide on microbic. II. The action of sodium azide on bacterial catalase, 231
— and respiration, Studies of the effect of sodium azide on microbic. III. The effect of sodium azide on the gas metabolism of *B. subtilis* and *P. aeruginosa* and the influence of pyocyanine on the gas exchange of a pyocyanine-free strain of *P. aeruginosa* in the presence of sodium azide, 239
— and respiration, Studies of the effect of sodium azide on microbic. IV. The effect of sodium azide on glucose fermentation and lactic acid production by streptococci and lactobacilli, 253
— factor requirements of bacteria, The influence of pH upon the. Abstract, (No abstract), 579
— inhibition, Mechanism of, by cationic detergents. Abstract, 454
— requirements, On the, of *Neisseria gonorrhoeae*, 287
Grubaugh, Karl K., Wyss, Orville, and Strandskov, Frede B. Abstract, 454
Grubb, Thomas C., and Aisenberg, Myron S. Abstract, 405
Guayule resins by microorganisms, Decomposition of, 559
Guggenheim, Karl, 313
Gunness, Marion, Stokes, J. L., and Foster, J. W., 293
Gunsalus, I. C., and Bellamy, W. D. Abstract, 413
— and Knaysi, Georges, 381
Haas, Victoria, and Barker, H. A., 301
Hadley, Faith P., Mellon, Ralph R., and Hadley, Philip B. Abstract, 473
Hadley, Philip B., Mellon, Ralph R., and Hadley, Faith P. Abstract, 473
Halvorson, H. O., Tuschiya, Henry M., Drake, Charles H., and Bieter, Raymond N. Abstract, 422
Hamre, Dorothy M., Dunham, Wolcott B., and Rake, Geoffrey. Abstract, 428
— and Rake, Geoffrey. Abstract, 312
Harker, Eleanor M., Ercoli, N., and Lewis, M. N. Abstract, 451
Hartmann, F. W., 259
Hartsell, Stanley E. Abstract, 439
Hawkins, W. W., and Young, E. Gordon, 351
Heat activation inducing germination in the spores of thermophilic aerobic bacteria. Abstract, 437
Hemagglutinins, Cold, in primary atypical pneumonia and other respiratory infections. Abstract, 460
Hemolysis, and lecithinase activity, Titration of *Clostridium perfringens* antitoxin by antihemolytic response. Abstract, 457
Hemolytic streptococci, Possible epidemiologic bearing of antigenic re-constitutions occurring in rough and diphtheroid cyclostages of. Abstract, 473
— streptococcus, The rate of growth and pathogenicity of an attenuated human group C. Abstract, 472
Hemophilus influenzae and *H. parainfluenzae*, Codehydrogenase I and other pyridinium compounds as V-factor for, 535
Herick, William van, Eaton, Monroe D., and Meiklejohn, Gordon. Abstract, 465
Herpetic infection, Influence of route of inoculation on susceptibility of mice to. Abstract, 468
— infection of the nervous system, Effect of specific antibodies on. Abstract, 469
Heterokaryosis in *Penicillium notatum* Westling. Abstract, 581
Heterotrophic bacteria, Populations of, in two sediment layers of Western Lake Erie. Abstract, 446
Heukelekian, H. Abstract. (No abstract), 311
Hilleman, M. R., and Gordon, F. B. Abstract, 464

Hillier, James, Zworykin, V. K., and Smith, Perry C. Abstract, 431
Himes, Alice T., and White, Harold J. Abstract, 426
Hirschberg, Nell. Abstract, 458
Hitchens, A. Parker, Breed, Robert S., and Murray, E. G. D. Abstract, 421
Hoban, Regina T., Blundell, George P., Erf, Lowell A., and Jones, Harold W., 85
Hofer, Alvin W. Abstract, 415
Hoffmann, C. E. and Rahn, Otto, 177
Hollaender, Alexander, and Oliphant, John W. Abstract, 471
Homosulfanilamide, Studies on. The mode of action of sulfanilamide. Abstract, 449
Hoover, Sam R., Allen, Paul J. and Naghski, J., 559
Hormaeche, E., Peluffo, C. A., and Ricaud de Pereyra, V., 323
Horner, C. Kenneth and Allison, Franklin E., 1
Horwood, Murray P. Abstract, 436
Houck, Carol L., McKee, Clara M. and Rake, Geoffrey, 187
Howe, Howard A., and Bodian, David. Abstract, 468
Hughes, Hope and Edwards, P. R., 574
Humphries, J. C. Abstract. No abstract, 579.
Hunter, Albert C. Abstract, 430
Hunter, Charles A. Abstract, 478
Hutner, S. H. Abstract, 433
Hyaluronidase (spreading factor), The production of high titer *Clostridium perfringens*. Abstract, 456
Hydrocarbon bacteria, Carbohydrate utilization by, 373
— bacteria, The oxidation of carbohydrates by. Abstract, 311
— production by sulfate-reducing bacteria. Abstract, 447
Hydrogen ion concentration, The influence of, on the bactericidal action of ozone and chlorine. Abstract, 445
— ion concentrations, Effect of, at various temperatures on a pure sodium salt of penicillin. Abstract, 425

Illinois Branch, S. A. B. Proceedings, 406
Immunity, Studies in passive, produced with Western equine encephalomyelitis antiserum. Abstract, 467
Immunization, Active, of children and animals with *Shigella paradysenteriae* Flexner. Abstract, 477
—, The response during, to individual components of the antigen mosaic of *Listerella monocytogenes*. Abstract, 461
Immunochemical studies on *Shigella paradysenteriae*. Abstract, 476
Immunological studies on the relationships of the psittacosis-lymphogranuloma group of viral agents. Abstract, 464
Influenza virus, The effect of monochromatic ultraviolet radiation on, as compared with other viruses. Abstract, 471
— virus Type A, The distribution of, in infected eggs and the survival of virus under certain conditions of storage. Abstract, 462
Inoculation, Influence of route of, on susceptibility of mice to herpetic infection, 468
Inositol, A microbiological assay for. Abstract, 434
Intestinal bacteria, The decomposition of allantoin by, 351
Iodine, Germicidal action of. Abstract, 454
Iron, The effect of, on carbohydrate metabolism of *Clostridium perfringens*. Abstract, 413
Irons, J. V., and Bohls, S. W. Abstract, 463

Jankowski, Gregory J., and ZoBell, Claude E. Abstract, 447
Johnson, Frank H., 551
— and Dennison, W. Landon. Abstract, 312
— and Schwarz, Horace W., 373; Abstract, 311
Johnson, R. D. Abstract. (No abstract), 579
Jones, Harold W., Blundell, George P., Erf, Lowell A. and Hoban, Regina T., 85
Jurist, Vivian, and Foy, John R. Abstract, 434

Kahn, Reuben L., and McDermott, Elizabeth B. Abstract, 460
Kane, Lewis W., Gould, R. Gordon, and Mueller, J. Howard, 287
Katznelson, H., and Lochhead, A. G. Abstract, 444
Kauffmann-White classification, A new *Salmonella* type, *Salmonella carrau*, with special reference to the 1,7··· phases of the, 323
Keeping, Frances E., and Wood, A. J., 309
Keller, Helen M., Cooper, Merlin L. and Tepper, Jack. Abstract, 477

Kentucky Branch, S. A. B. Proceedings, 213
Keyes, E. A., Reid, J. J., Farrell, M. A., and Shigley, J. F. Abstract, 440
Knaysi, Georges and Gunsalus, I. C., 381
Korns, Robert F. Abstract, 582
Krampitz, L. O., Utter, M. F., and Werkman, C. H. Abstract, 412
—, Welshimer, H. J., and Werkman, C. H. Abstract, 425

Lactic acid bacteria, Substitution of thymine for folic acid in the nutrition of. Abstract, 433
— acid production, The effect of sodium azide on glucose fermentation and, by streptococci and lactobacilli. Studies of the effect of sodium azide on microbic growth and respiration. IV, 253
Lactobacilli, Differences between dissociants of. Abstract, 418
Lactobacillus casei E., A microbiological assay for riboflavin B_2 using. Abstract, 113
Lamanna, Carl, 327
Landy, Maurice, and Gerstung, Ruth B. Abstract, 448
Lawrence, C. A. Abstract, 452
— and Goetchius, George A. Abstract, 450
Leberman, Paul R. Abstract. No abstract, 113
Ledingham, G. A., and Stanier, R. Y. Abstract, 443
Lee, Miriam E., and Genung, Elizabeth F. Abstract, 434
Lee, S. W., Foley, E. J. and Epstein, Jeanne A., 110
—, Foley, E. J. and Epstein, Jeanne A., 573
Levinson, Sidney O., Milzer, Albert, and Lewin, Philip. Abstract, 467
Lewandowski, Thaddeus, and Stahly, Grant L. Abstract, 472
Lewin, Philip, Milzer, Albert, and Levinson, Sidney O. Abstract, 467
Lewis, M. N., Ercoli, N., and Harker, Eleanor M. Abstract, 451
Liberal arts college, Bacteriology and the. Abstract, 479
Lichstein, Herman C., and Soule, Malcolm H., 221, 231, 239, 253
Lipid production by a soil yeast. Abstract, 579
Listerella, Effectiveness of penicillin on, 110
— *monocytogenes*, The response during immunization to individual components of the antigen mosaic of. Abstract, 461
Listeria, An unidentified growth factor for, in commercial "vitamin-free" casein. Abstract, 433
Liver extract, Use of, as an enrichment factor for the growth of gonococci, 399
Living systems, Clues regarding the structure and organization of the simplest. Abstract. No abstract, 312
Lochhead, A. G. and Katznelson, H. Abstract, 444
Logan, M. A., Byers, S. O., and Tytell, A. A. Abstract, 456
Lumichrome, Bacterial oxidation of riboflavin to. Microbiological aspects of riboflavin. I. Introduction. II, 27
Luria, S. E. Abstract, 416
Lymphogranuloma-psittacosis group of agents, A new member of the. Abstract, 312
— *venereum* (Lygranum), The complement fixation reaction with the antigen of. Abstract, 464

Magnuson, Harold J., and Eagle, Harry. Abstract, 427
Malaria. Diagnostic problems in tropical medicine. A. Abstract. No abstract, 579
—, Experimental aspects of the chemotherapy of. Abstract. No abstract, 406
— parasites, Vi agglutinative properties for *Bacterium typhosum* demonstrated following infection with. Abstract, 582
Marburg, A study of the so-called, and the Lawrence and Ford strains of *Bacillus subtilis*, 381
Maren, Thomas H. and Foley, Edward J. Abstract, 580
Maryland Branch, S.A.B. Proceedings, 405
Mason, Herman C., and Twyble, Ellsworth. Abstract, 462
Mattison, B. F. Abstract, 581
McCoy, E., McDaniel, L. E., and Sylvester, J. C. Abstract, 443
McDaniel, L. E., McCoy, E., and Sylvester, J. C. Abstract, 443
McDermott, Elizabeth B., and Kahn, Reuben L. Abstract, 460
McKee, Clara M., Rake, Geoffrey and Houck, Carol L., 187
McMahon, V. Bennett, 400
Meat packing industry, Bacteriological problems of the. Abstract. No abstract, 406

Meats, The riboflavin content of luncheon. Abstract, 113
Media, selective culture, The isolation of *Proteus morganii* type I and paracolon bacilli from. Abstract, 459
—, Selective, suitable for use in a hot climate, for the isolation of *Eberthella typhosa* and *Salmonella*. Abstract, 458
Medium, The use of a solid, for the transportation of specimens for culture of the gonococcus. Abstract, 458
Meiklejohn, Gordon, Eaton, Monroe D., and Herick, William van. Abstract, 465
Mellon, Ralph R., Hadley, Philip B., and Hadley, Faith P. Abstract, 473
Meningococci, Germicidal action of daylight on, in the dried state, 79
Meningococcus agglutinins, An investigation of type specific, in human serum. Abstract, 459
— carriers, An institutional survey of. Abstract. No abstract, 406
—, The resistance of, to drying, 71
Microburette system, A. Abstract, 582
Micrococci, Comparative resistance of desiccated and wet, heated under moist and dry conditions. Abstract, 437
Micrococcus lysodeikticus, Oxidation of acetyl phosphate by. Abstract, 412
Microscopic method of counting bacteria, Mechanical aids in the direct, 495
Milk, Contribution of *Streptococcus uberis* to the plate count of. Abstract, 440
Miller, C. Phillip. Abstract. No abstract, 406
— and Schad, Doretta, 71, 79
Milzer, Albert, Lewin, Philip, and Levinson, Sidney O. Abstract, 467
Moore, R. L., and Gibbons, N. E. Abstract, 439
Morgan, Isabel M. Abstract, 466
—, Schlesinger, R. Walter, and Olitsky, Peter K. Abstract, 466
Morton, Harry E., 379; Abstract. (No abstract), 113
— and Engley, Frank B., Jr. Abstract, 475
— and Perez-Otero, Juan Enrique. Abstract, 475
— and Sommer, Harriet E., 123
Moyer, Andrew J., and Schmidt, William H., 199; Abstract, 424
Mudd, Stuart. Abstract. (No abstract), 312
Mueller, J. Howard, Gould, R. Gordon, and Kane, Lewis W., 287
Murray, E. G. D., Breed, Robert S., and Hitchens, A. Parker. Abstract, 421
Murray, H. C., 117
Musselman, Arlyne D., and Eagle, Harry. Abstract, 428
Mutations, bacterial, Mutations of bacterial viruses affecting the host-range and their relation to. Abstract, 416
Myers, Fred P., and Porter, J. R. Abstract, 435
Myxomatosis, Effect of radioactive phosphorus on infectious. Abstract, 462

Naghski, J., Allen, Paul J. and Hoover, Sam R., 559
Neisseria gonorrhoeae, Further observations on the nutritional requirements of. Abstract, 432
— *gonorrhoeae*, On the growth requirements of, 287
— *gonorrhoeae*, p-Aminobenzoic acid synthesis by, in relation to clinical and cultural sulfonamide resistance. Abstract, 448
— *gonorrhoeae*, Quantitative agglutinative reactions of the *Neisseria* with special reference to. Studies on the gonococcus. III, 149
—, Quantitative agglutinative reactions on the, with special reference to *Neisseria gonorrhoeae*. Studies on the gonococcus, III, 149
Neter, Erwin R., and Clark, Phyllis. Abstract, 459
New Jersey Branch, S.A.B. Proceedings, 311, 406, 579
Nitrogen fixation, Carbon monoxide as an inhibitor of, by the alga *Nostoc muscorum*. Abstract, 410
— *fixation*, Utilization of fixed nitrogen by *Azotobacter* and influence on, 1
—, Utilization of fixed, by *Azotobacter* and influence on nitrogen fixation, 1
Niven, C. F., Jr., 343
— and Sherman, J. M., 335
Non-mastitic udder, The streptococcal flora of the. Abstract, 440
Norman, A. G., and Bartholomew, W. V., 499
Nostoc muscorum, Carbon monoxide as an inhibitor of nitrogen fixation by the alga. Abstract, 410

Novelli, G. David, and ZoBell, Claude E. Abstract, 447
Nutrition of *Streptococcus lactis*, 343
—of the enterococci, 335
Nutritional requirements of *Neisseria gonorrhoeae*, Further observations on the. Abstract, 432
— requirements, The, of a strain of type III *Pneumococcus*, 509
— requirements, The, of *Clostridium acidiurici*, 307

Obold, Walter L. Abstract, 113
—and Berle, Lillian C. Abstract, 113
Oliphant, John W., and Hollaender, Alexander. Abstract, 471
Olitsky, Peter K., Schlesinger, R. Walter, and Morgan, Isabel M. Abstract, 466
Olson, Carl, Jr., and Warren, Frederick G., 495
Orcutt, F. S., and Bozeman, S. R., Abstract, 418
—, Coffee, W. B., Ginsberg, H., and Bozeman, S. R. Abstract, 419
Oxidation, Bacterial, of riboflavin to lumichrome. Microbiological aspects of riboflavin. I. Introduction. II, 27
—, The, of 2,3-butylene glycol in the genera *Aerobacter*, *Aerobacillus* and *Aeromonas*. Abstract, 412
Ozone and chlorine, The influence of hydrogen ion concentration on the bactericidal action of. Abstract, 445

p-Aminobenzoic acid derivatives, The *in vitro* effects of N-substituted, upon sulfonamides. Abstract, 450
— acid synthesis by *Neisseria gonorrhoeae* in relation to clinical and cultural sulfonamide resistance. Abstract, 448
p-Aminobenzoyl-1-(+)-glutamic acid and p-aminobenzoic acid, The comparative antisulfanilamide activity of. Abstract, 452
Pappenheimer, A. M., Jr. and Shaskan, Eleanor. Abstract, 413
Para-aminobenzoic acid, The action of sulfonamides and of, on *Bacterium tularense*, 529
Paracolon bacilli, The isolation of *Proteus morganii* type I and, from selective culture media. Abstract, 459
Parsons, Elizabeth I., and Frobisher, Martin, Jr. Abstract, 477
Pearson, Harold E. Abstract, 462
Pederson, Carl S., and Fisher, Paul. Abstract, 421
Peluffo, C. A., Hormaeche, E., and Ricaud de Pereyra, V., 323
Penicillin, A simplified technique for the agar cup assay of, 402
—, An analysis of the therapeutic action of, based on the clinical response of patients and correlated laboratory findings. Abstract, 430
—, Antibacterial reactions and some clinical applications of crude. Abstract, 405
— chemotherapy, Ineffectiveness of, of infectious polyarthritis of rats. Abstract, 427
—, Destruction of, by bacteria. Abstract, 426
—, Effect of certain hydrogen ion concentrations at various temperatures on a pure sodium salt of. Abstract, 425
—, Effectiveness of, on *Listerella*, 110
— -fast strain of *Treponema pallidum*, The development of a. Abstract, 428
— inactivators. Abstract, 426
— *in vitro* (*Treponema pallidum*-Reiter strain), The spirocheticidal action of. Abstract, 428
— -like substance- flavacidin, The production and properties of a. Studies on *Aspergillus flavus*. II, 187
— I. Methods of assay, 199
— I. Methods of assay. Abstract, 424
—, Procedure for the cup assay for, 43
— production, A rapid and accurate method for testing, by different strains of *P. notatum*, 308
— production, Natural variation and, by *Penicillium notatum* and allied species. Abstract, 423
—, Standardization of assay of. Abstract, 430
—, The effect of, on experimental streptococcus, pneumococcus and staphylococcus infections of the egg embryo, 573
—, The mechanism of action of. Abstract, 425
—, The therapeutic efficacy of, in experimental relapsing fever. Abstract, 427
Penicillinase, Bacterial. Abstract, 425
Penicillium citrinum Thom, The utilization of various carbon and nitrogen sources by. Abstract, 411

Penicillium notatum, A rapid and accurate method for testing penicillin production by different strains of, 308
— *notatum* and allied species, Natural variation and penicillin production by. Abstract, 423
— *notatum* Westling, Heterokaryosis in. Abstract, 581
Peptone, Glucose utilization compared with pH produced when influenced by concurrent decomposition of, by the genus *Bacillus*. Abstract, 418
Perez-Otero, Juan Enrique, and Morton, Harry E. Abstract, 475
Perlman, Ely, Binkley, Francis, and Goebel, Walther F. Abstract, 476
Perry, C. A. Abstract. No abstract, 478
Peterson, W. H. and Barker, H. A., 307
Petroleum hydrocarbons, Assimilation of, by sulfate-reducing bacteria. Abstract, 447
pH, The influence of, upon the growth factor requirements of bacteria. Abstract. No abstract, 579
Phenol coefficient determination on germicides and antiseptics, Lack of correlation between plate tests and, 109
Photosynthetic bacteria, Oxidation of alcohols by non-sulfur, 355
Physiology of micro-organisms, Recent advances in our knowledge of the. Abstract, 431
Phytomonas tumefaciens and *Alcaligenes radiobacter*, The serological relationship of. Abstract, 420
Pike, Robert M. and Foster, Alice Zimmerman, 97
Pittman, Margaret. Abstract, 427
Plasma, The comparative value of human, and human whole blood for testing the coagulating power of staphylococci, 211
Plastridge, W. N., Seeley, H. W., Jr., and Anderson, E. O. Abstract, 440
Plate tests and phenol coefficient determination, Lack of correlation between, on germicides and antiseptics, 109
Pleuropneumonia-like organisms, Electron micrographs of, 523
Pneumococci, A quantitative study of the volume change accompanying the "Quellung reaction" of. Abstract, 312
Pneumococcus, A partially defined medium for the cultivation of the. Abstract, 432
—, The nutritional requirements of a strain of type III, 509
Pneumonia, A filterable virus from atypical, transmissible to cotton rats, hamsters, and chick embryos. Abstract, 465
— and other respiratory infections, Cold hemagglutinins in primary atypical. Abstract, 460
Poliomyelitis by accidental contagion in the chimpanzee. Abstract, 468
— induced by inoculation of tooth pulp cavities. Abstract, 405
—, Studies on the influence of fatigue, chilling and trauma on experimental. Abstract, 467
Polyarthritis of rats, Ineffectiveness of penicillin chemotherapy of infectious. Abstract, 427
Porter, J. R., and Myers, Fred P. Abstract, 435
Post-vaccination cases, The verification test in. Abstract, 460
Powell, H. M. Abstract, 427
Precipitation test for syphilis, Cardiolipin, lecithin, and cholesterol in the antigen in the. Abstract, 581
Process times, Determination of, for home canned foods. Home canning. II. Abstract, 438
Proteus morganii, The nutrition of. Amino acid interrelationships. Abstract, 435
— *morganii*, The nutrition of. Sulfur requirements. Abstract, 435
— *morganii* type I and paracolon bacilli, The isolation of, from selective culture media. Abstract, 459
Psittacosis-lymphogranuloma group of viral agents, Immunological studies on the relationships of the. Abstract, 464
Public health and medical bacteriologists, Training of. Abstract. No abstract, 478
— health laboratories, Summary of discussion of training personnel for. Abstract, 479
— health laboratories, The training of bacteriologists for. Abstract, 478
— health laboratories, The training of students for positions in. Abstract, 478
Pyocyanine, The effect of sodium azide on the gas metabolism of *B. subtilis* and *P. aeruginosa*, and the influence of, on the gas exchange of a pyocyanine-free strain of *P. aeruginosa* in the presence of

sodium azide. Studies of the effect of sodium azide on microbic growth and respiration. III, 239
Pyridinium compounds, Codehydrogenase I and other, as V-factor for *Hemophilus influenzae* and *H. parainfluenzae*, 535
Pyridoxine, The effect of, on tyrosine decarboxylation and on fermentation. Abstract, 413

"Quellung reaction" of pneumococci, A quantitative study of the volume change accompanying the. Abstract, 312
Quinine inhibition of bacterial enzyme systems, The nature of the. Abstract, 406

Radioactive phosphorus, Effect of, on infectious myxomatosis. Abstract, 462
Rahn, Otto, and Hoffmann, C. E., 177
Rake, Geoffrey, Dunham, Wolcott B., and Hamre, Dorothy M. Abstract, 428
— and Hamre, Dorothy M. Abstract, 312
—, McKee, Clara M., and Houck, Carol L., 187
Randles, C. I., and Birkeland, Jorgen M. Abstract, 454
Raper, Kenneth B., Alexander, Dorothy F., and Coghill, Robert D. Abstract, 423
Rehm, John B., Sommer, Marie, and Ellerbusch, Vernon. Abstract, 442
Reid, J. J., and Coleman, Madeline F. Abstract, 420
—, Farrell, M. A., Keyes, E. A., and Shigley, J. F. Abstract, 440
—, Stone, R. W., Williams, P. S., and Bechdel, S. I. Abstract, 441
Reilly, H. Christine, and Waksman, Selman A., 308; Abstract, 407
Relapsing fever, The therapeutic efficacy of penicillin in experimental. Abstract, 427
Reproductive processes, Various types of, *in Bacteroides* strains. Abstract, 417
Respiratory tract, Evaluation of errors in determining the bacterial flora of the. Abstract, 470
Rhizobium bacteriophage, Electron microscope studies on *Azotobacter* flagellation and. Abstract, 415
Riboflavin B_2, A microbiological assay for, using *Lactobacillus casei* E. Abstract, 113
— content, The, of luncheon meats. Abstract, 113
—, Microbiological aspects of. I. Introduction. II. Bacterial oxidation of riboflavin to lumichrome, 27
Ribonucleic acid and the Gram stain. Abstract, 415
Ricaud de Pereyra, V., Hormaeche, E., and Peluffo, C. A., 323
Rickettsia prowazeki, Survival of, in different diluents, 519
Rigney, E. and Wells, W. F. Abstract, 113
Rittschof, L. A., Garey, J. C., Stone, L., and Boruff, C. S. Abstract, 442
Robbins, Mary Louise, and Griffin, A. M. Abstract, 461
Roe, Amy S., and Adams, Mark H. Abstract, 432
Rogosa, M., 159
Rosenow, Edward C. Abstract, 470

Salmonella carrau, A new *Salmonella type*, with special reference to the 1,7··· phases of the Kauffmann-White classification, 323
— organisms, The occurrence and possible significance of, in Canadian dried egg powder. Abstract, 439
— *pullorum*, Electron microscope studies on the bacteriophage of, 277
— problem, The, in Illinois. The distribution of types and their identification. Abstract, 406
—, Selective media, suitable for use in a hot climate, for the isolation of *Eberthella typhosa* and. Abstract, 458
— strains isolated from stool specimens from mentally deficient children. Abstract, 474
—type, A new, isolated from man and fowls, 574
— type, A new, *Salmonella carrau*, with special reference to the 1,7···phases of the Kauffmann-White classification, 323
Schad, Doretta, and Miller, C. Phillip, 71, 79
Schaub, Isabelle G., and Foley, M. Kathleen. Abstract, 455
Scherp, Henry W., and Welton, Jane Plack. Abstract, 432
Schlenk, Fritz, and Gingrich, Wendell, 535
Schlesinger, R. Walter, Olitsky, Peter K., and Morgan, Isabel M. Abstract, 466
Schmidt, William H., and Benedict, Robert G. Abstract, 425

Schmidt, William H. and Moyer, Andrew J., 199; Abstract, 424
Schuhardt, V. T., Worley, Gordon, Jr., and Beal, Grace. Abstract, 453
Schwarz, Horace W. and Johnson, Frank H., 373, Abstract, 311
Schwentker, Francis F. Abstract, 405
Scott, Robert, Walker, Vernon L. and Clark, Eugene S. Abstract, 445
Seeley, H. W., Jr., Anderson, E. O., and Plastridge, W. N. Abstract, 440
Serum, human, An investigation of type specific meningococcus agglutinins in. Abstract, 459
Sevag, M. G., and Green, Morris N. Abstract, 450, 451
Severens, J. M., Baylor, M. R. B., and Clark, G. L., 277
Sexual mode of reproduction, Observations indicating a, in a common bacterium (*Bacteroides funduliformis*). Abstract, 417
Shaskan, Eleanor, and Pappenheimer, A. M., Jr. Abstract, 413
Sherman, J. M., and Niven, C. F., Jr., 335
Sherwood, M. B., Falco, E. A., and DeBeer, E. J. Abstract, 424
Shigella alkalescens, The formation of trimethylamine from choline as a characteristic of, 309
— *dispar*, Biochemical and serological properties of. Abstract, 419
— group, An arabinose-fermenting bacterium of the lactose-negative, mannitol-negative, 171
— *paradysenteriae* Flexner, Active immunization of children and animals with. Abstract, 477
— *paradysenteriae*, Immunochemical studies on. Abstract, 476
— *sonnei*, Antigens of. Abstract, 579
—, Species differentiation within the genus, by test for reduction of trimethylamine oxide, 575
Shigley, J. F., Reid, J. J., Farrell, M. A., and Keyes, E. A. Abstract, 440
Silage, alfalfa, Effect of wilting on the fermentation of. Abstract, 441
Skelton, F. M., 273
Slanetz, L. W. Abstract, 478
Slavin, Howard B., Evans, Charles A., and Berry, George P. Abstract, 468, 469
Smith, Perry C., Zworykin, V. K., and Hillier, James. Abstract, 431
Smith, William E. Abstract, 417
Smith, Winslow Whitney, and Ames, Ada Mae. Abstract, 445
—, and Bodkin, Richard E. Abstract, 445
Snyder, Adele, Friewer, Frances, DeMuth, V. Cook and Bass, Kenneth. Abstract, 406
Society of American Bacteriologists, 45th general meeting. Scientific Proceedings, 409
Sodium azide, Studies of the effect of, on microbic growth and respiration. I. The action of sodium azide on microbic growth, 221
— II. The action of sodium azide on bacterial catalase, 231
— III. The effect of sodium azide on the gas metabolism of *B. subtilis* and *P. aeruginosa*, and the influence of pyocyanine on the gas exchange of a pyocyanin-free strain of *P. aeruginosa* in the presence of sodium azide, 239
— IV. The effect of sodium azide on glucose fermentation and lactic acid production by streptococci and lactobacilli, 253
Soils, The cholesterol-decomposing organisms of. Microbiological agencies in the degradation of steroids. I, 487
Sommer, Harriet E., and Morton, Harry E. 123
Sommer, Marie, Rehm, John B., and Ellerbusch, Vernon. Abstract, 442
Soule, Malcolm H., and Lichstein, Herman C., 221, 231, 239, 253
Spaulding, E. H., Adams, Rebecca F., and Chemerda, Cecelia. Abstract, 449
Spirocheticidal action, The, of penicillin *in vitro* (*Treponema pallidum*-Reiter strain). Abstract, 428
Spoilage of home canned foods, Survey of bacteriological and other factors responsible for the. Home canning. I. Abstract, 438
Stahly, Grant L., and Lewandowski, Thaddeus. Abstract, 472
Staining method, A, for *Corynebacterium diphtheriae*, 575
— procedure, Fatty material in bacteria and fungi revealed by a new. Abstract, 414

Stanier, R. Y., and Adams, G. A. Abstract, 411
— and Fratkin, S. Abstract, 412
— and Ledingham, G. A. Abstract, 443
Staphylococci, Lack of correlation between the formation of arylamines (p-a.b.a.?) and resistance of, to sulfonamides. Abstract, 451
—, The comparative value of human plasma and human whole blood for testing the coagulating power of, 211
—, The isolation of pathogenic, from feces, 211
Staphylococcus aureus, Indispensability of tryptophane, and glucose or pyruvate for the formation of arylamines (para-aminobenzoic acid (p-a.b.a.)?) by. Abstract, 450
— *aureus* infection of mice, The chemotherapeutic activity of sulfonamides in the. Abstract, 451
— infections, Local application of sulfonamides to experimental, 259
Starkey, Robert L. Abstract, 312
—. Abstract, 579
Steroids, Microbiological agencies in the degradation of. I. The cholesterol-decomposing organisms of soils, 487
Stewart, Sarah E. Abstract, 457
Stokes, J. L. Abstract, 311, 433
— Gunness, Marion, and Foster, J. W., 293
Stokinger, Herbert E., Ackerman, Helen, and Carpenter, Charles M., 129, 141, 149
Stone, L., Garey, J. C., Rittschof, L. A., and Boruff, C. S. Abstract, 442
Stone, R. W., Reid, J. J., Williams, P. S., and Bechdel, S. I. Abstract, 441
Stool specimens, *Salmonella* strains isolated from, from mentally deficient children. Abstract, 474
Strandskov, Frede B., Wyss, Orville, and Grubaugh, Karl K. Abstract, 454
Streptococcal fibrinolysis, The mechanism of. Abstract, 471
— flora, The, of the non-mastitic udder. Abstract, 440
— infections, The epidemiology of. Abstract, 405
Streptococci and lactobacilli, The effect of sodium azide on glucose fermentation and lactic acid production by. Studies of the effect of sodium azide on microbic growth and respiration. IV, 253
—, Group B, and malignant diphtheria. Abstract, 474
—, The combined bacteriostatic activity of sulfanilamide and azochloramid upon, in *in vitro* and *in vivo* studies, 273
—, The variation of group C hemolytic, 123
Streptococcus lactis, Nutrition of, 343
—, pneumococcus and staphylococcus infections, of the egg embryo, The effect of penicillin on, 573
— *salivarius*, A variant of, that produces levan from sucrose at 37°C but not at 40°C. Abstract, 472
— *salivarius* and *Streptococcus mitis* in man, The relative incidence of. Abstract, 473
— *uberis*, Contribution of, to the plate count of milk. Abstract, 440
Stuart, C. A. Abstract, 478
—, Borman, Earle K., and Wheeler, Kenneth M. Abstract, 420
Sugar utilization, Further evidence demonstrating, by certain members of the genus *Bacillus* where the pH of sugar-peptone media is not appreciably lowered. Abstract, 419
Sulfaiodines—their properties and bactericidal effects. Abstract, 580
Sulfamylon derivatives, The *in vitro* effects of, upon bacteria. Abstract, 452
Sulfanilamide, and azochloramid, The combined bacteriostatic activity of, upon streptococci in *in vitro* and *in vivo* studies, 273
—, The mode of action of. Studies on homosulfanilamide. Abstract, 449
Sulfate-reducing bacteria, Assimilation of petroleum hydrocarbons by. Abstract, 447
— -reducing bacteria, Hydrocarbon production by. Abstract, 447
Sulfonamide inhibitor production, The demonstration of, by bacteria on agar containing sulfonamide, 97
— mechanism, Further studies on. Abstract, 311
— resistance, p-Aminobenzoic acid synthesis by *Neisseria gonorrhoeae* in relation to clinical and cultural. Abstract, 448
—, The demonstration of sulfonamide inhibitor production by bacteria on agar containing, 97

Sulfonamides, Lack of correlation between the formation of arylamines (p-a.b.a.?) and resistance of staphylococci to. Abstract, 451
—, Local application of, to experimental *Staphylococcus* infections, 259
—, The action of, and of para-aminobenzoic acid on *Bacterium tularense*, 529
—, The chemotherapeutic activity of, in the *Staphylococcus aureus* infection of mice. Abstract, 451
—, The *in vitro* effect of certain, upon *Brucella*. Abstract, 453
—, The *in vitro* effects of N-substituted p-aminobenzoic acid derivatives upon. Abstract, 450
Sulphur requirements. The nutrition of *Proteus morganii*. Abstract, 435
Svec, Muriel Harden, 505
Sylvester, J. C., McCoy, E., and McDaniel, L. E. Abstract, 443
Syphilis, Cardiolipin, lecithin, and cholesterol in the antigen in the precipitation test for. Abstract, 581
Swimming pool waters, Bacteriological studies of. Abstract, 445

Tager, M. Abstract. No abstract, 579
Tamura, Joseph T., 529
Temperature coefficient, The, of the bactericidal action of chlorine. Abstract, 445
— -sulfonamide relationships, *In vitro* studies upon endocarditis streptococci: I. Abstract, 449
Tepper, Jack, Cooper, Merlin L., and Keller, Helen M. Abstract, 477
Texas Branch, S.A.B. Proceedings, 214
Thermogenesis, Microbial, in the decomposition of plant materials. Part III. Simplified equipment for routine studies, 499
Thermophilic aerobic bacteria, Heat activation inducing germination in the spores of. Abstract, 437
— bacteria, Aerobic decomposition of cellulose by, 117
Thiamin, Studies on the synthesis of, by certain strains of *Escherichia coli*. Abstract, 434
Thioglycollate medium, Importance of the use of, in diagnostic bacteriology. Abstract, 455
— type medium, The use of various reducing agents in a. Abstract, 456
Thioglycollates, Pure, in culture medium. Abstract, 580
Thom, Charles. Abstract, 428
Thompson, William R. Abstract, 582
Thymine, Substitution of, for folic acid in the nutrition of lactic acid bacteria. Abstract, 433
Tillett, W. S. Abstract, 430
Tischer, R. G., and Esselen, W. B., Jr. Abstract, 438
Tobie, Walter C., and Ayres, Gilbert B., 109
Tooth pulp cavities, Poliomyelitis induced by inoculation of. Abstract, 405
Toxin, Production of, by *Clostridium septicum* in a peptone-free medium. Abstract, 413
Toxins, Observations on the effect of ultra violet irradiation (Knott technic) on bacteria and their, suspended in human blood and appropriate diluents, 85
Training of public health and medical bacteriologists. Abstract, 478
— personnel for public health laboratories, Summary of discussion of. Abstract, 479
—, The, of bacteriological technicians. Abstract, 478
—, The, of bacteriologists for public health laboratories, 478
—, The, of students for positions in public health laboratories. Abstract, 478
Treponema pallidum, The development of a penicillin-fast strain of. Abstract, 428
Trichomonas foetus (Protozoon), Bovine intracutaneous and serological reactions to fractions of, 505
"*Trichophyton rosaceum*", Misuse of the name, for a saprophytic *Fusarium*, 107
Trimethylamine oxide, Species differentiation within the genus *Shigella* by test for reduction of, 575
—, The formation of, from choline as a characteristic of *Shigella alkalescens*, 309
Tropical medicine, Diagnostic problems in. A. Malaria. B. The dysenteries. Abstract. No abstract, 579
Tryptophane, and glucose or pyruvate, Indispensability of, for the formation

of arylamides (para-amino-benzoic acid (p-a.b.a.)?) by *Staphylococcus aureus*. Abstract, 450
Tsuchiya, Henry M., Drake, Charles H., Halvorson, H. O., and Bieter, Raymond N. Abstract, 422
Turfitt, G. E., 487
Twyble, Ellsworth, and Mason, Herman C., 462
Tyrosine decarboxylation, The effect of pyridoxine on, and on fermentation. Abstract, 413
Tyrothricin action, Observations on the electron microscopy of *B. cereus*, and, 551
Tytell, A. A., Byers, S. O., and Logan, M. A. Abstract, 456

Ultra violet irradiation, (Knott technic) on bacteria and their toxins suspended in human blood and appropriate diluents, 85
— radiation, The effect of monochromatic, on influenza virus as compared with other viruses. Abstract, 471
Umbreit, W. W. and Bartholomew, J. W. Abstract, 415
Updyke, Elaine, and Frobisher, Martin, Jr. Abstract, 474
Utter, M. F., Krampitz, L. O., and Werkman, C. H. Abstract, 412

Valko, E. I. and DuBois, A. S., 15
van Dyke, H. B. Experimental aspects of the chemotherapy of malaria. Abstract. No abstract, 406
Van Neil, C. B. Abstract, 431
Variation, bacterial. The influence of environment upon the dissociation pattern. Abstract. No abstract, 579
Variola virus, Stability of, cultivated in embryonated eggs. Abstract, 463
Vegetable juice, Bactericidal activity of. Abstract, 421
Venereal diseases, Management of, in the Navy. Abstract. No abstract, 113
Vera, Harriette D., 59; Abstract, 455
Verification test, The, in post-vaccination cases. Abstract, 460
Virus, A filterable, from atypical pneumonia transmissible to cotton rats, hamsters, and chick embryos. Abstract, 465
— reactions inside of bacterial host cells. Abstract, 113
—, The distribution of influenza virus Type A in infected eggs and the survival of, under certain conditions of storage. Abstract, 462
Viruses, bacterial, Mutations of, affecting the host-range and their relation to bacterial mutations. Abstract, 416
— of Eastern and Western equine encephalomyelitis, Embryonic chick antigens for complement fixation with the. Abstract, 463
Vitamin content of ingredients of microbiological culture media, 293
— requirements of lactose-fermented and certain other yeasts, 159
Vitamins of the B-complex, The transformation of certain, during decomposition under aerobic and anaerobic conditions. Abstract, 312

Waksman, Selman A. Abstract, 429
—, and Geiger, Walton B., 391
—, and Reilly, H. Christine, 308; Abstract, 407
Walker, Vernon L., Scott, Robert, and Clark, Eugene S. Abstract, 445
Warren, Frederick G., and Olson, Carl, Jr., 495
Waterborne outbreak, An unusual, of gastroenteritis. Abstract, 582
Wattie, Elsie, and Butterfield, C. T. Abstract, 444
Weeks, Owen B. Abstract, 446
Weil, A. J. and Black, J., 575
Weiss, Lucile Jamieson, 523
Wells, W. F., and Rigney, E. Abstract, 113
Welshimer, H. J., Krampitz, L. O., and Werkman, C. H. Abstract, 425
Welton, Jane Plack, and Scherp, Henry W. Abstract, 432
Werkman, C. H., Utter, M. F., and Krampitz, L. O. Abstract, 412
— Welshimer, H. J., and Krampitz, L. O. Abstract, 425
Wheeler, K. M. Abstract, 579
—, Borman, Earle K., and Stuart, C. A. Abstract, 420
White, Harold J., and Himes, Alice T. Abstract, 426
Williams, P. S., Stone, R. W., Reid, J. J., and Bechdel, S. I. Abstract, 441
Williams, Roger D. Abstract, 452
Wilson, P. W. and Burris, R. H. Abstract, 410

Wilting, Effect of, on the fermentation of alfalfa silage. Abstract, 441
Wood, A. J. and Keeping, Frances E., 309
Woodruff, H. Boyd, and Foster, Jackson, W., 43; Abstract, 425
Worley, Gordon, Jr., Beal, Grace, and Schuhardt, V. T. Abstract, 453
Wyss, Orville. Abstract, 311
—, Grubaugh, Karl K., and Strandskov, Frede B. Abstract, 454

Yeast, Lipid production by a soil. Abstract, 579
Yeasts, Vitamin requirements of lactose-fermented and certain other, 159
Yesair, J., Cameron, E. J., and Bohrer, C. W. Abstract, 437
Young, E. Gordon, and Hawkins, W. W., 351
Young, Viola Mae. Abstract, 474

Zichis, Joseph. Abstract, 467
ZoBell, Claude E., and Jankowski, Gregory J. Abstract, 447
—, and Novelli, G. David. Abstract, 447
Zworykin, V. K., Hillier, James, and Smith Perry C. Abstract, 431